DCoMPASS™

Digital Compact Multi-Purpose Advanced Stabilized System - UAV

General

The DCoMPASS payload is the one of the newest members of our CoMPASS battle-proven stabilized EO payload family, in service with leading customers worldwide.

- Delivers superb day and night intelligence, surveillance, target acquisition and tactical reconnaissance (ISTAR) capabilities in the harshest weather conditions
- Single LRU configuration integrating up to five EO elements: HD color TV camera with optional low light mode, large format thermal imager, laser target illuminator, eyesafe laser rangefinder (ELRF) and laser target designator
- Lightweight, small size payload made possible by new miniature digital electronics and advanced lightweight materials
- Precise geo-location and pointing capabilities provided by incorporated gimbal IMU (Inertial Measurement Unit)
- Battle proven, military qualified for airborne application

Elbit Systems™ ISTAR

DCoMPASS

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Applications

- Border and maritime patrol
- Surveillance
- Law enforcement
- Laser targeting

Main Advantages & Features

- Highly stabilized crystal clear image on both HD color TV and thermal imager
- Compact and lightweight design permits additional payload and fuel capacity in the carrying platform while facilitating future upgrades
- Inertial Measurement Unit (IMU) provides highly accurate geo-location and rock solid stabilization
- Unique in-flight boresight mechanism enables long range precise laser designation
- Simple system integration with helmet mounted systems (HMS), radar and fire control applications
- Advanced video enhancement package including: haze penetration, color restoration and sharpening features
- Step & Stare feature provides ISR persistence

Technical Data

System

- Diameter 15″
- Weight <33 Kg
- Angular coverage
- - Azimuth N x 360°
- - Elevation +35° to -85°
- Environmental conditions MIL-STD-810F

Day Channel (HD)

- Camera type Large format digital CCD color camera
- Sensor 2/3″ CCD
- No. of pixels 1394 x 1040
- FOV (continuous zoom)
- - Narrow 0.59° x 0.44°
- - Wide 21.25° x 16°

Thermal Imager

- FLIR Cooled 3rd generation 3-5 µm FPA with 640 x 512 pixels

- FOV

	FLIR A - TOPAZ	FLIR B - LOTUS
Wide	24° X 18°	13.7° X 10.4°
Medium	Continuous	2.0° x 1.5°
Narrow	0.8° X 0.6°	0.61° x 0.46°

Laser Sensors

- Laser Rangefinder (Eyesafe)
- - Wavelength 1.54 µm
- - Rate 1 pps
- Dual Wavelength Laser Target Designator & Rangefinder (LRFTD)
- - Transmitter Diode-pumped advanced technology
- - Wavelength 1.064 µm / 1.57 µm
- - Max pulse rate 20pps
- Laser target illuminator/pointer
- - W avelength 830 nm (NVG compatible)

Interface Communications

- RS422
- MIL-STD-1553
- Ethernet

Video Output

- PAL, NTSC
- Gigabit Ethernet (GigE)

Additional features

- Geo-location using Inertial Measurements Unit (IMU)
- Auto-tracker
- Step & Stare
- Picture In Picture (PIP)

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